MEMORANDUM FOR: All NWS Regional Headquarters, Regional
Maintenance Specialists, Electronic Systems
Analysts, and Electronics Technicians
[Engineering Handbook (EHB)-13, Series II
distribution]

FROM: W/OPS1 - John McNulty

SUBJECT: Transmittal Memorandum for EHB-13 Series II,
Issuance 02-04

1.   Material Transmitted:

Engineering Handbook No. 13 Series II, Advanced Weather
Interactive Processing System (AWIPS), section 3.1, AWIPS
Software Installation Instruction Note 26, Maintenance
Release 5.1.2.2

2.   Summary:

AWIPS Software Installation Instruction Note 26, provides
instructions to download and install maintenance release
5.1.2.2.

3.   Effect on Other Instructions:

File this note in EHB-13, Series II, section 3.1. Discard
all previous software installation instructions in
section 3.1.

AWIPS SOFTWARE INSTALLATION INSTRUCTION NOTE 26
(for Electronic Systems Analysts)
Maintenance, Logistics, & Acquisition Division
W/OPS1: FJZ

SUBJECT   : Maintenance Release 5.1.2.2.

PURPOSE   : To provide installation instructions for three patches.

PATCH NUMBER   : P512_SEC_A100180

AUTHORIZATION   : The authority for this modification note is Request for Change RC180

AFFECTED SITES   : All AWIPS Release 5.1.2 sites must install this maintenance release.

**VERIFICATION   : The Release 5.1.2.2 installation procedures were tested and verified at
STATEMENT**   Amarillo, TX (AMA), Southern Region Headquarters, Ft. Worth, TX (EHU),
                           Mobile, AL (MOB), and Eastern Region Headquarters, Bohemia, NY
                           (VUY).

PREINSTALLATION: • R5.1.2.1 must be installed.
REQUIREMENTS   • Logouts of all D2D sessions and the Text Workstations

TIME REQUIRED   : Approximately 25 minutes

SECURITY LEVEL   : root

**TECHNICAL   : For questions or problems regarding these installation instructions or
SUPPORT**   installing this Release, please contact the NCF at 301-713-9344**.**

GENERAL

The summary of R5.1.2.2 fixes are as follows:

- SCAN/FFMP update for fxaWish hang and bad FFMP rates (DR #9259, 9906, 9907 - P512_MDL_A100177)
- WWA patch #1 (DR #9297, 9709, 9716, 9718, 9747 - P512_MDL_A1001
- Fix a performance problem with loading radar mosaics (DR #9776 - P512_FSL_A100179)
- Update for pathcast generated from LocalCitiesInfo.txt (DR #9707 - P512_FSL_A100178)
- Update RiverPro formatter with CRS header changes for VIP (DR #9986 - P512_OHD_A100184)
- Update SSHP to update maximum forecast stage value (DR #9987 - P512_OHD_A100185)
- Fix mcUpdtstat to perform database tuning on hmdb (DR #10045)
- IFPS patch #1 (DR #9668, 9870, 9871 - P512_MDL_A100186)
- Correct problem causing "ifpServer" to stop handling requests (Linux) (DR #9313 - P512_FSL_A100174)
- Linux workstation patch #1 (DR #9911, 9976 - P512_SECA100181)

R5.1.2.2 Detailed Description

- SCAN/FFMP update for fxaWish hang and bad FFMP rates (DR #9259, 9906, 9907 - P512_MDL_A100177) repairs the following:
  - S   D2D freeze when fxaWish reads a file written by the FFMPprocessor.
  - S   Incorrect order of the basin and county rates in the FFMP Basin Table when old data time is entered.
  - S   Incorrect accumulation county data in the Basin Table when old data time is entered.

- WWA patch #1 (DR #9297, 9709, 9716, 9718, 9747 - P512_MDL_A100176) repairs the following:
  - S   Standardize Hazard Menu (DR #9297). OSUs national products list is now every WFO's hazard menu.
  - S   Tone alerted NWR messages were not triggered by NWR (DR #9709). Using wwa_nwr_twrs list now triggers tone alerts and generates products.
  - S   Provide correct text/PIL for backup sites (DR #9716). Corrects the PIL sent to the wwaServer and product text from the the WWA composer.
  - S   Provide correct text/PIL for current site (DR #9718). Corrects PIL and missing text when selecting local site from the WWA composer's site menu.
  - S   Update WWA setup GUI to prevent characteristic fields from being altered (DR #9747). Lockout field from making changes to Hazard type, generic name, & specific product names.

NOTE: These changes require a post-installation localization (see Appendix A, Note to AWIPS Focal Point).

- Repair radar mosaic loading performance problem (DR #9776 - P512_FSL_A100179).

- Update pathcast generated from LocalCitiesInfo.txt (DR #9707 - P512_FSL_A100178).
  - S   Repairs localization problem when using LocalCitiesInfo.txt to add cities for Warngen pathcasts.

> **NOTE:**   These changes require a post-installation localization (see Appendix A, Note to AWIPS Focal Point).

- Update RiverPro formatter with CRS header changes for VIP (DR #9986 - P512_OHD_A100184)
  - S   To support "C" character in the header to activate NWR Voice Improvement Program.
  - S   To include the CRS header changes needed for the VIP.

- Update SSHP to update maximum forecast stage value (DR #9987 - P512_OHD_A100185)
  - S   Now enables RiverStatus table information update when a forecast stage timeseries is saved to the database.
  - S   SSHP now updates maximum forecast stage value.

- Repairs mcUpdtstat to perform database tuning on hmdb (DR #10045)
  - S   Incorporate table-specific performance tuning for the 'hmdb' database.

- IFPS PAtch #1 (DR #9668, 9870, 9871 - P512_MDL_A100186)
  - S   IUR now indicates zones to be updated and preserves text edits in the updated forecast.
  - S   IGR now prompts multi-users when exiting.
  - S   Snow amounts are now averaged correctly when unloaded.

- Correct problem causing 'ifpServer' to stop handling requests (Linux) (DR #9313 - P512_FSL_A100174)

- Linux Workstation Patch #1 (DR #9911, 9976 - P512_SECA100181)
  - S   Install screensaver SLO fix
  - S   Install new matrox video drivers for Xfree86 4.0.3 on RedHat 7.1 (DR #9976)
  - S   Install RedHat security patches for rlogin, rexec, rsh and telnet (DR #9911)
  - S   Install new flush_nfs workaround for SLOs
    -- add script to flush the NFS cache
    -- add entry to the 'root' user cron to flush NFS cache hourly
  - S   Check that the NFS read/write packet sizes are correct for all NFS mounts listed in `/etc/fstab`
    -- Verify 'rsize=8192' and 'wsize=8192' settings on NFS `filesystems /home, /data/fxa, /data/local`
    -- Verify 'noac' setting on NFS filesystem `/data/fxa_local`

PROCEDURE

A. Pre-installation for NDFD/MDL Alpha Software Sites

Go to http://isl715.nws.noaa.gov/tdl/icwf/Alpha521/ for 5.1.2.1 and 5.1.2.2 pre-installation and post-installation instructions.

B. Maintenance Release download and ds1 Installation Procedure

> **NOTE:** PRC has pushed the "R5.1.2.2.tar.Z" file to the "/data/local/R5.1.2.2" directory at each AWIPS site.

1. At a workstation, open a telnet window and log into ds1 as **root** by typing:

   ```
   rlogin ds1-<site> -l root
   ```

2. Change to the /data/local/R5.1.2.2 directory by typing:

   ```
   cd /data/local/R5.1.2.2
   ```

3. Start the output script log by typing:

   ```
   script -a R5.1.2.2.out
   ```

4. Uncompress the release bundle by typing:

   ```
   zcat R5.1.2.2.tar.Z | tar xvf -
   ```

5. Run installation script by typing:

   ```
   ./installR5.1.2.2
   ```

6. Stop the output script by typing:

   ```
   ./stopscript
   ```

This completes the maintenance release download and installation procedure.

C. Post Installation Configuration Checkout

Check if all files were removed/copied correctly. Check for "`cannot write: Text file busy`". If present, the file must be manually removed.
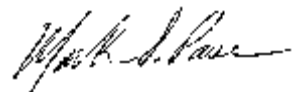
```
grep busy R5.1.2.2.out
```

This completes the post installation configuration checkout.

REPORTING MODIFICATION

Report the completed modification on a WS Form A-26, Maintenance Record, according to the instructions in Engineering Handbook 4 (EHB-4), Engineering Management Reporting System (EMRS), Part 2, and Appendix I. A sample WS Form A-26 is attached. As an additional guide, use the information in the table below.

Block #	Block Type	Information
5	Description	Upgrade AWIPS Software to R5.1.2.1 I.A.W. AWIPS Software Installation Instruction Note 25
7	Equipment Code	AWIPS
8	Serial Number	001
15	Comments	Upgraded AWIPS System Software to R5.1.2.1 I.A.W. AWIPS Software Installation Instruction Note 25
17a	Mod. No.	S25

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Attachment A - Note to AWIPS Focal Point
Attachment B - WS Form A-26 Sample

Attachment A
Note to AWIPS Focal Point

> **NOTE:**   Steps 1 and 2 require a workstation localization. Perform localization one
> workstation at a time and after both modifications are complete.

1. The patch removes the WWA database and replaces the MDL supported database. Sites must reconfigure site unique files. Fifteen WarnGen template files were changed in order for the AUX_INFO section to match new entries in the uploaded characteristics table. The new template files will be uploaded into the `/awips/fxa/data/localization/nationalData` directory. The changed template files are listed below and must be merged into custom templates, if the option is used.

wwa_ffw.preWWA	wwa_specmarine.preWWA
wwa_blosnow_adv.preWWA	wwa_flflood_sta.preWWA
wwa_flood_wrn.preWWA	wwa_sws.preWWA
wwa_cst_fld_sta.preWWA	wwa_flflood_wat.preWWA
wwa_hls.preWWA	wwa_urbssflood_adv.preWWA
wwa_cst_fld_wat.preWWA	wwa_flood_wat.preWWA
wwa_shortterm_fcst.preWWA	wwa_marine_ugc.preTemplate
wwa_cst_fld_wrn.preWWA	wwa_svrwx_sta.preWWA
wwa_snoblsno_adv.preWWA	wwa_svrwx_sta_county.pre WWA

a. The changed template files will be listed as soon as the new WWA web page is developed.   Sites must merge WarnGen AUX_INFO template file changes as described in step b below.

> **NOTE:**   Create a custom WarnGen template file before performing the AUX_INFO
> changes.

    b.   Sites using a custom file configuration, must merge the AUX_INFO sections, from the uploaded template files, with the associated custom template files from the custom file directory. Below is an example of the AUX_INFO field of a tornado WarnGen template file:

```
< AUX_INFO | wx_hazard=Tornado | issue_prod=$$cccValue!TOR$$xxxValue!
>
```

    c.   To capture the AUX_INFO changes, format the new WWA, and format the new WWA template files, it will be necessary to run a "-wwa" localization as shown in step 2a.

2.   Sites can now locolize `LocalCitiesInfo.txt` to add cities for Warngen pathcasts. Sites should undo any workarounds that may have been implemented. The most common workaround was to add the desired local cities to `/awips/fxa/data/CitiesInfo.txt` file. These entries should now be removed and the site should reinstate the `LocalCitiesInfo.txt` file into `/data/fxa/customFiles`.

    a.   Run localization for each workstation separately by typing:

```
su - fxa
cd /fxa/data/localization/scripts
./mainScript.csh -wwa -station
```

    b.   After localization, confirm the workstation(s) operates properly with the new WWA configuration. Also verify warngen uses the local cities in the pathcast.

Attachment B

WS FORM A -26 (4/94)	WS FORM A -26 (4/94) **ENGINEERING MANAGEMENT REPORTING SYSTEM** MAINTENANCE RECORD U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL WEATHER SERVICE	Document Number **G 49978**

General Information	**1.** Open Date **3/ 01 / 02**	Time **0900**	**2.** Initials **JMM**	**3.** Response Priority (check one) ○ Immediate ○ Low ○ Routine X Not Applicable	**4.** Close Date **3/ 01 / 02**	Time **1000**

5. Description   **Install AWIPS maintenance release 5.1.2.2 (patch # P512_SEC_A100180) I.A.W. AWIPS Software Installation Instruction Note 26**

Equipment Information	**6.** Station ID **PHI**	**7.** Equipment Code **AWIPS**	**8.** Serial Number **001**	**9.** TM **M**	**10.** AT **M**	**11.** How Mal. **999**

12. *EQUIPMENT OPERATIONAL STATUS TIMES*	**a.** Fully Operational	**b.** Logistics Delay	Partly Operational **c.** All Other	**d.** Logistics Delay	Not Operational **e.** All Other

13. Parts Failure Information / 14. Work Load Information

Block #	**a.** ASN	**b.** NSN	**c.** TM	**d.** AT	**e.** How Mal.	**f.** Qty.	**g.** Maint. Hrs.	Type	Staff Hrs.
1								**a.** Routine	
2								**b.** Non-routine	
3								**c.** Travel	
4								**d.** Misc.	**1:00**
5								**e.** Overtime	

Miscellaneous Information	**15.** Maintenance Comments **Installed maintenance release 5.1.2.2 (patch number P512_SEC_A100180 I.A.W. AWIPS Software Note 26.**	**16.** Initials **JMM**

17. *SPECIAL PURPOSE REPORTING*	**a.** Mod. No. **S26**	**b.** Mod./Act./Deact.Date **3/01/02**	**c.**	**d.**	**e.**

18. *CONFIGURATION MGMT. REPORTING* (use as directed)	ASN	Vendor Part Number (New Part)	Serial Number (Old Part)	Serial Number (New Part)